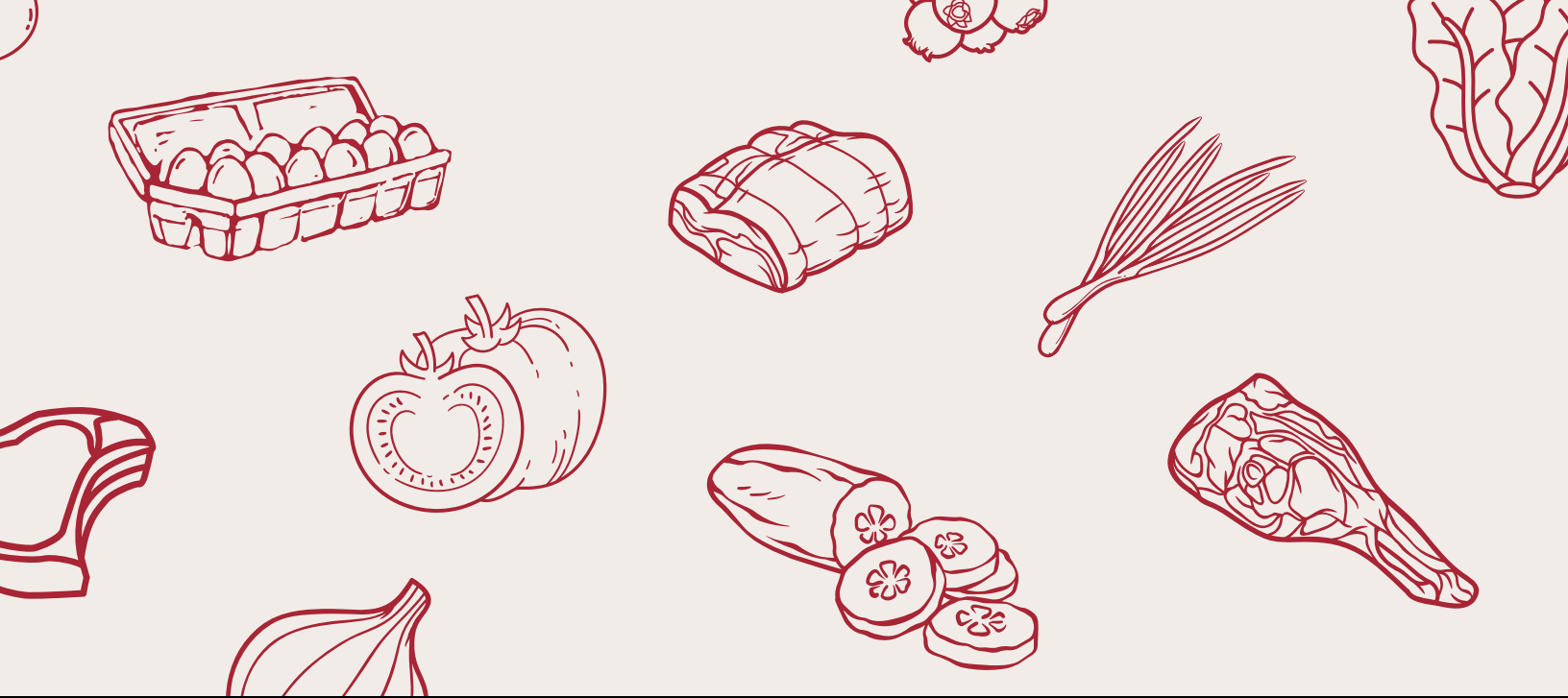


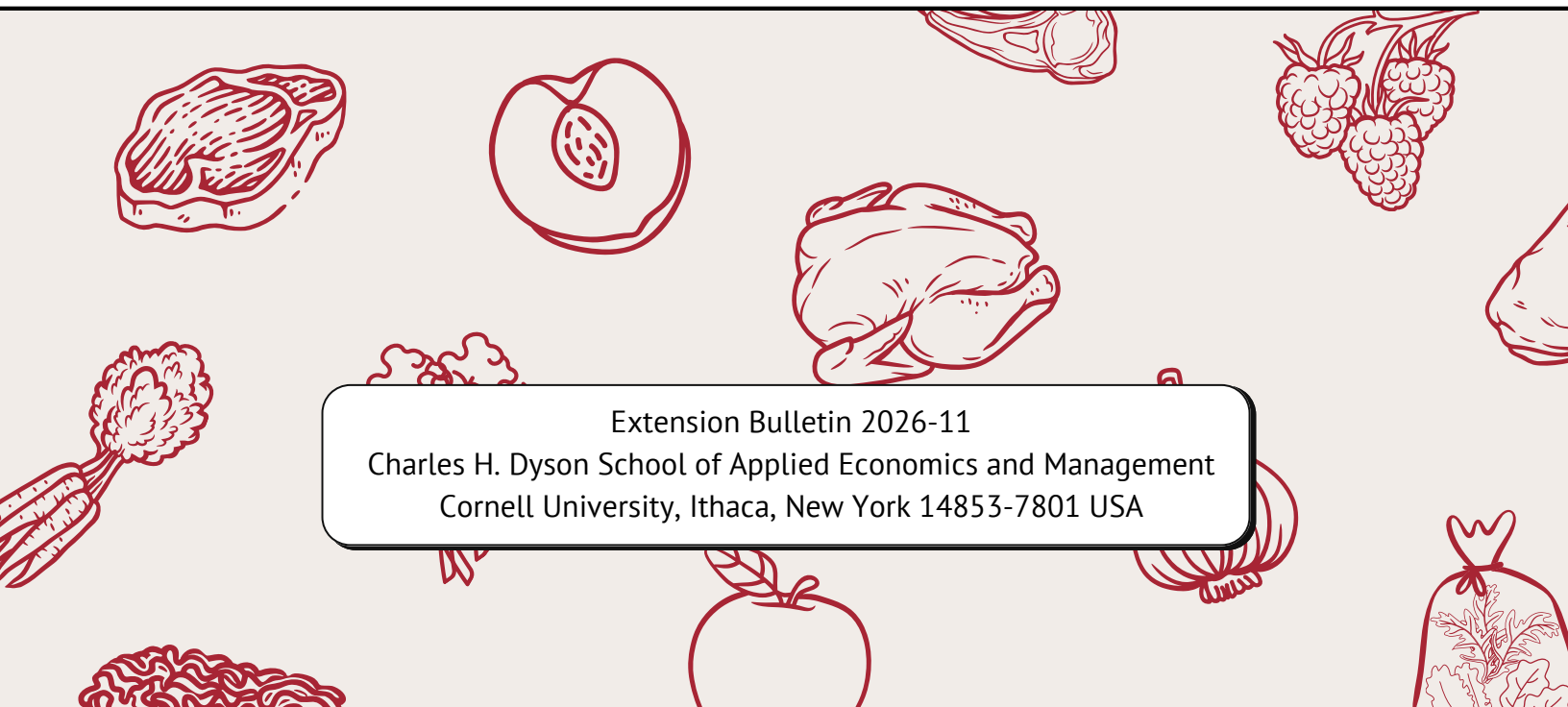


Cornell University

Farm Performance at NY Farmers Markets

2025 Summary

Cornell Agricultural Marketing Research Program
By Matthew LeRoux, Luca Rigotti & Todd Schmit



Extension Bulletin 2026-11
Charles H. Dyson School of Applied Economics and Management
Cornell University, Ithaca, New York 14853-7801 USA

Cornell Agricultural Marketing Research Program

Mission

To strengthen New York's food and agriculture viability using applied research to develop practical teaching and tools for direct-marketing farms.

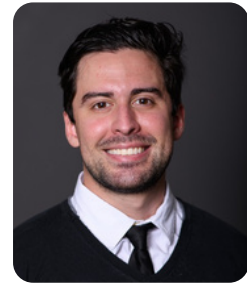
Our Team



Todd Schmit
Professor



Matt LeRoux
Extension Associate



Luca Rigotti
Research Support Specialist



FARMERS MARKET
RESEARCH PROJECT
farmersmarketresearch.cornell.edu



Scan to visit
project website

Cornell
CALS
College of Agriculture
and Life Sciences



Dyson
Cornell
SC Johnson College of Business



This work is supported by the USDA, AMS,
and FMPP, under award number
24FMPPNY1218-00

Questions about this publication? Contact Matt LeRoux at mnl28@cornell.edu

© Copyright 2026, Cornell University

Research on Customer Spending at NY Farmers Markets

Introduction

The Cornell Agricultural Marketing Research Program (CAMRP), in collaboration with farms across New York State, collects and analyzes thousands of customer transactions at farmers markets (FM) using electronic Point-of-Sale (POS) software. This annual report summarizes key findings from the 2025 season.

What is POS?

POS software, like Square, captures detailed transaction data at farmers markets, including date, time, location, payment method, and items sold and their quantities. Analyzing this data helps farms identify ways to enhance customer engagement and spending by implementing new marketing practices, leading to increased transaction size and daily sales.

The purpose of the Farmers Market Research Project (FMRP) is to identify opportunities for farms to increase customer transaction size (CTS) and ultimately, daily sales at their markets. This report highlights top-selling products, and calculates useful benchmarks like customers per hour, items per customer, and average item value. In addition, the sales data allows for the creation of monthly Farmers Market Price Reports, also posted to the project website.

Visit the project website at: farmersmarketresearch.cornell.edu

The discussion includes ideas for improving market performance. While these ideas are exploratory and not formally tested, they are informed by analysis of customer transactions collected across multiple farms and markets. Additional information and resources can be found on the project website.

Analysis of sales data reveals opportunities for new marketing practices to influence key performance metrics. To begin, choose one or two metrics that you most wish to improve and brainstorm ideas that might influence the metric. Introduce new practices and monitor sales data to see the results.

Customer counts, CTS, and daily sales are separate but related metrics and changes in one may or may not impact the others. For example, a given change to market practices, while increasing CTS, could possibly dissuade some shoppers and lead to reduced customer counts. Farms should track several metrics using their POS sales data and monitor for the desired effect.

Metrics are interconnected, so monitor all key metrics when making changes. Remember, no change is permanent. If new practices do not produce the desired effect, they can be changed again. Experimenting, keeping track, and fine tuning are key to enhancing market performance.

Farmers Markets and Farms: POS Sales Data from NY

- Sales data collected using the Square POS system.
- In the project: 28 farms selling at 56 FMs around NY.
- Farmers markets varied by size and location, representing a mix of urban and rural communities across New York State.

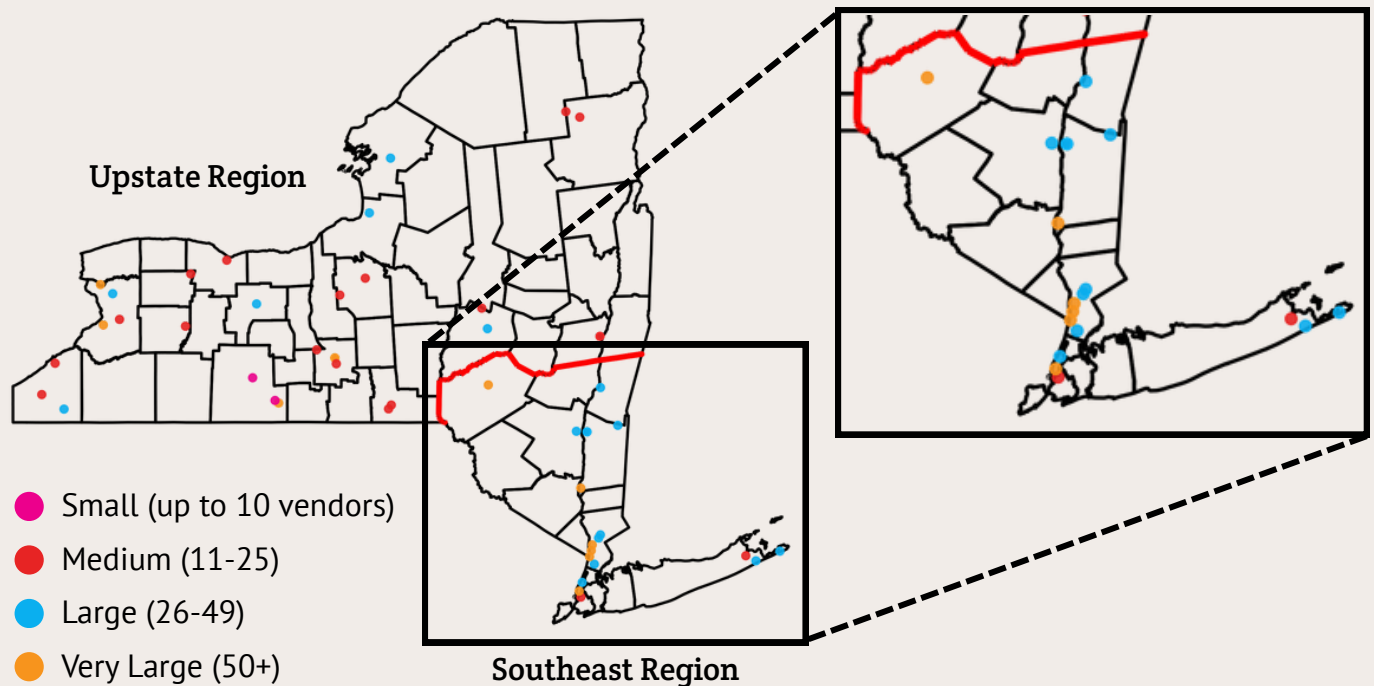
The number of farms selling products by category:

	Beef	Pork	Poultry	Lamb & Goat	Eggs	Dairy	Fruit & Vegetable
NY Total:	10	16	11	7	16	3	20

Note for Farmers:

When reviewing the statistics in this report, consider the number of farms selling in each product group.

2025 Project Farmers Market Location and Sizes



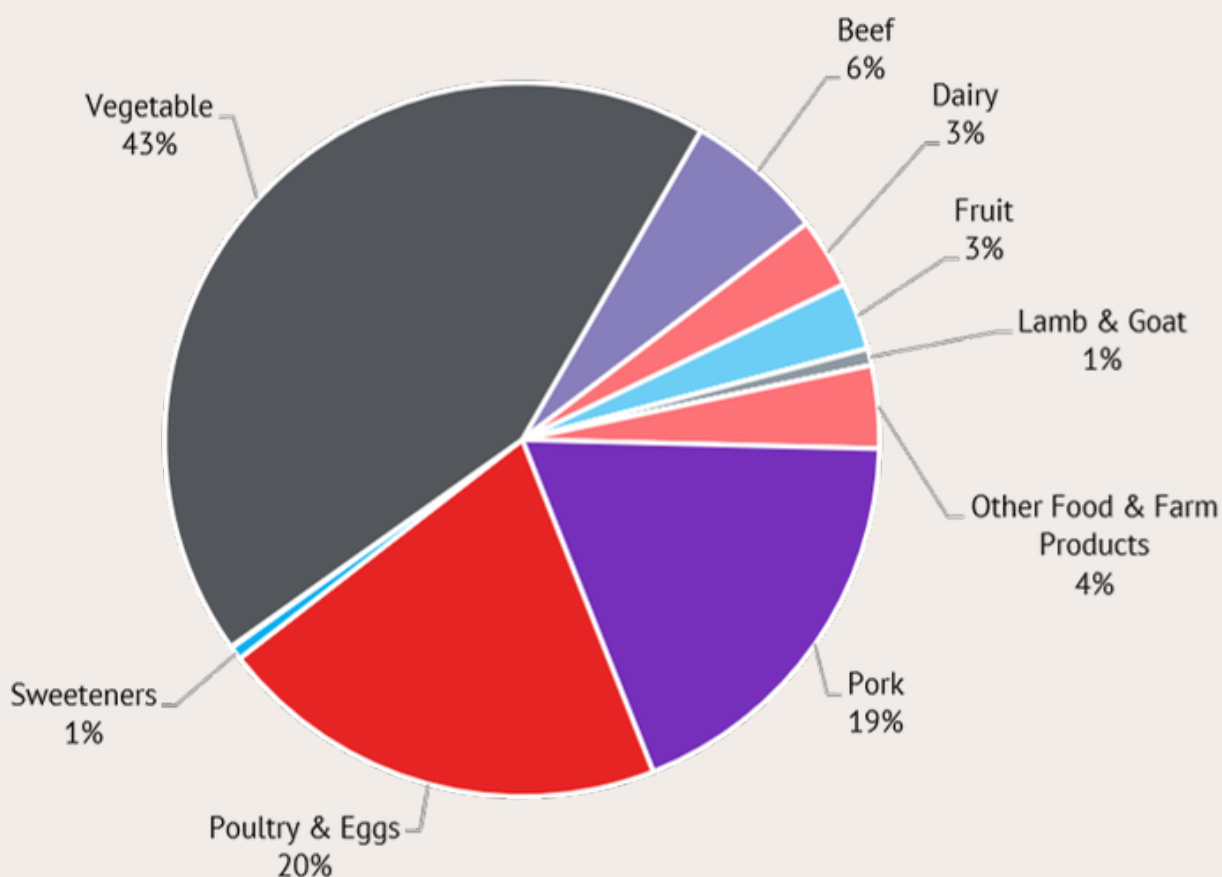
Sample Size Overview:

- Total Transactions Containing Only Fruit and/or Vegetable Products: **60,144**
- Total Transactions Containing Only Meat and/or Dairy Products: **41,095**

Breakdown of Total Sales by Product Group

This chart shows the percentage breakdown of total sales (\$) by product group across all participating farms in 2025. It's important to note that these figures reflect the availability of items brought to market by participating farms as well as consumer demand. For example, 16 of the 28 farms sold pork, influencing the proportion of pork sales. This does not necessarily mean that consumers prefer pork more than other product groups but perhaps that it was available for sale by many vendors very often.

Breakdown of Sales Volume (\$) by Group



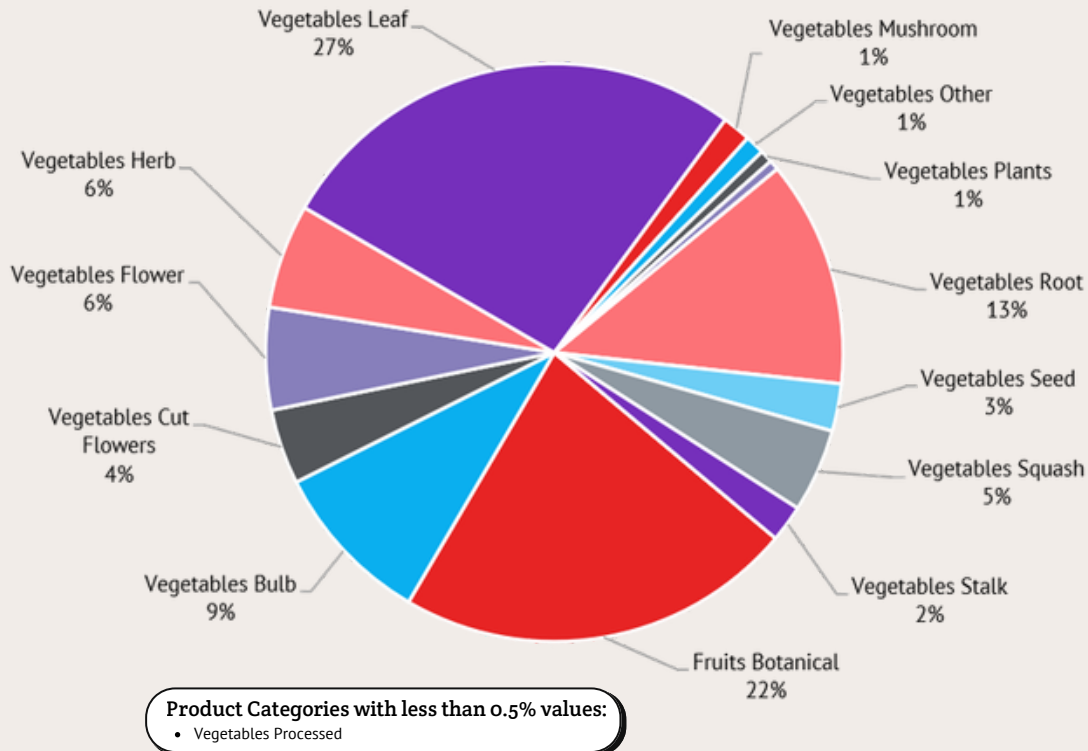
Product Categories with less than 0.5% values:

- Veal
- Game Species
- Mixed Species Bundles

To see how the project groups and categorizes products: see the document titled "Point of Sale Product & Category Naming Protocol", located on the Best Practices tab of the project website.

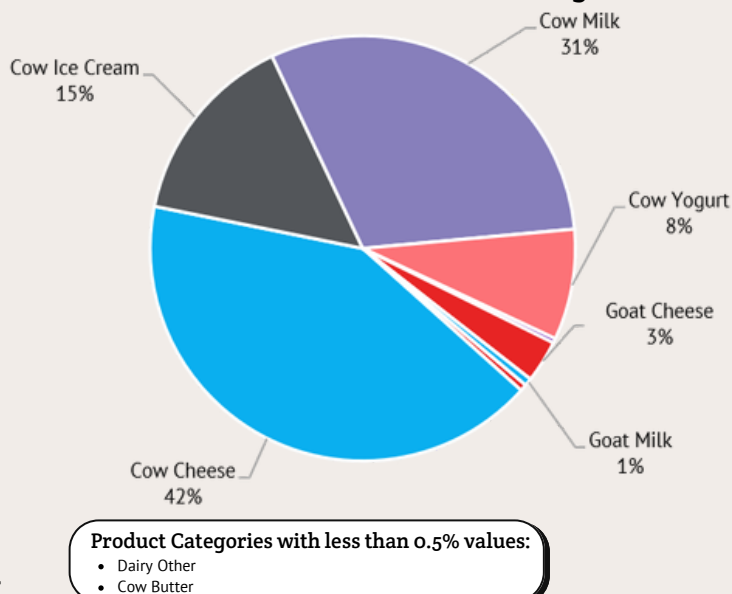
Breakdown of Total Sales by Product Category

Sales Volume (\$): Vegetables

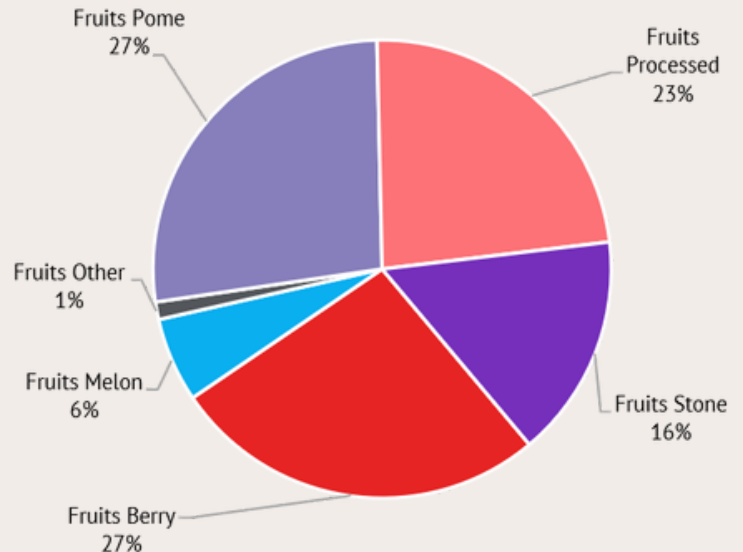


- It's important to note that this chart reflects the fruits and vegetables sold by participating farms, not necessarily customer preferences.
- Few farms in the study sold fruit or dairy.
- Product Categories with less than 0.5% values are omitted from charts.

Sales Volume (\$): Dairy

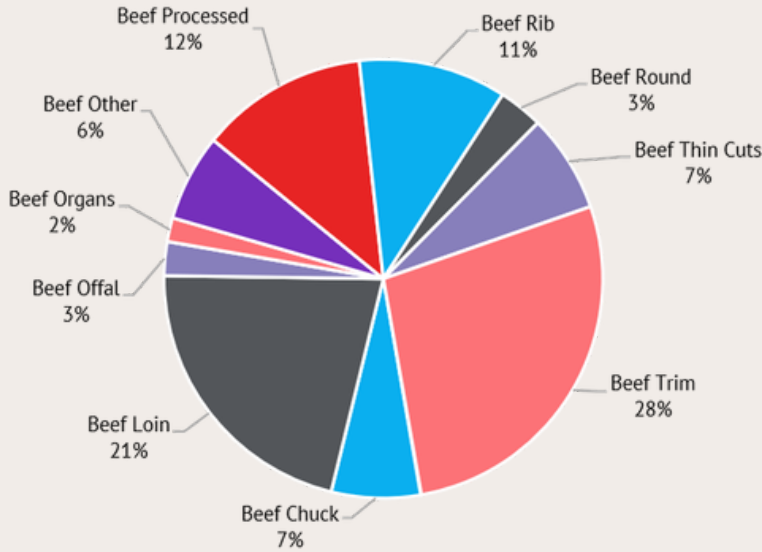


Sales Volume (\$): Fruit



Breakdown of Total Sales by Product Category

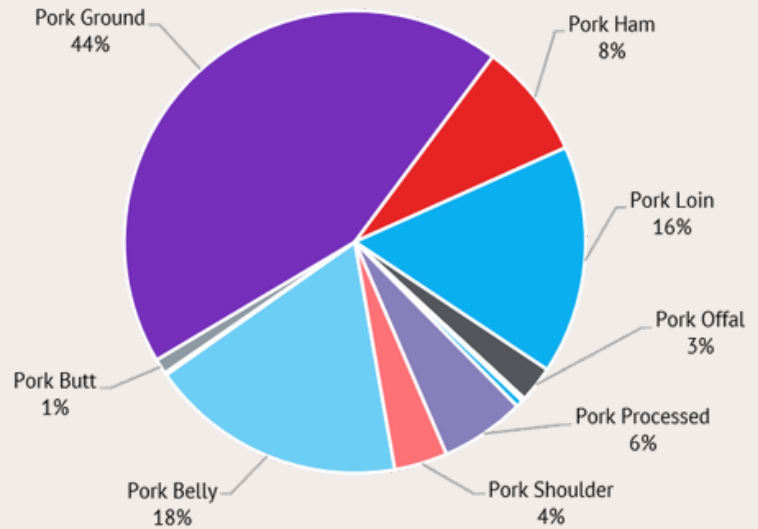
Sales Volume (\$): Beef



Product Categories with less than 0.5% values:

- Beef Bundles

Sales Volume (\$): Pork

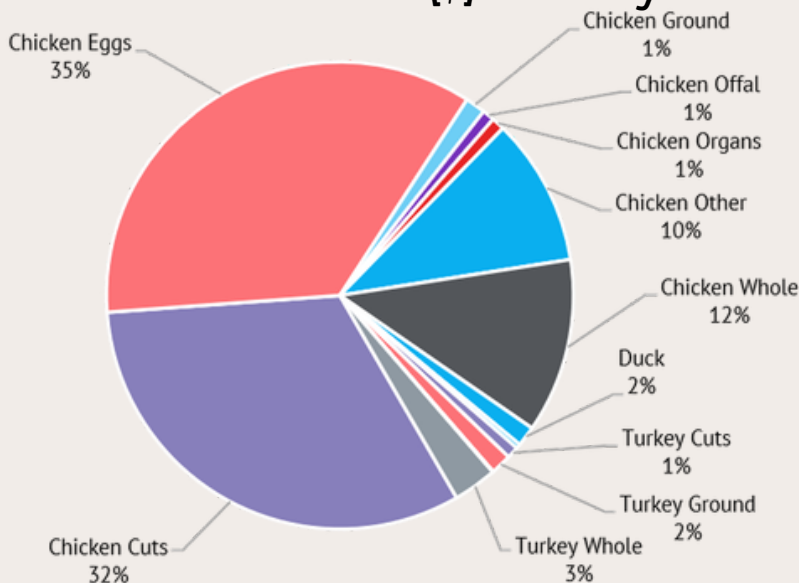


Product Categories with less than 0.5% values:

- Pork Other
- Pork Bundles
- Pork Organs

- While these breakdowns don't necessarily reveal consumer preferences, they do offer insights into product yield, availability, and farm processing decisions.
- Product Categories with less than 0.5% values are omitted from charts.

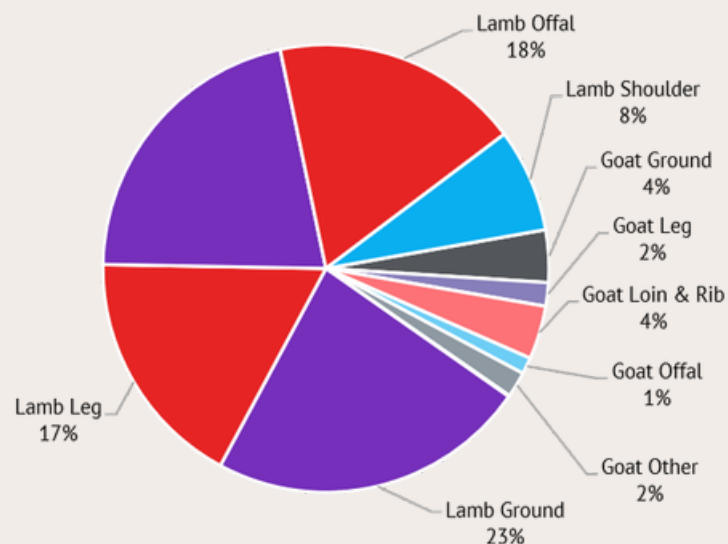
Sales Volume (\$): Poultry



Product Categories with less than 0.5% values:

- Turkey Other
- Duck Eggs

Sales Volume (\$): Lamb & Goat



Product Categories with less than 0.5% values:

- Goat Shoulder

Overall Market and Farm Performance Metrics

Meat (Inc. Dairy & Eggs)	2025 All Farm Average
CTS	\$24.40
Meat Daily Sales	\$803
Meat Customers/Hour	7.5
Meat Item Value	\$13.72
Meat customer Item Count	1.8
Fruit & Vegetable	2025 All Farm Average
CTS	\$15.71
Veg Daily Sales	\$1,226
Veg Customers/Hour	17.0
Veg Item Value	\$5.21
Veg Customer Item Count	3.0

Understanding this table:

This table summarizes the average results from all farms that participated in the 2025 project. These averages are shaped by a range of factors, including the types of products farms offered, their locations (urban vs. rural), and level of vendor experience.

Please Note:

Throughout this report, "Meat (Inc. Dairy & Eggs)" represents transactions that contain exclusively meat and/or dairy and/or egg items.

Throughout this report, "Fruit & Vegetable" represents transactions that contain exclusively fruit and/or vegetable items.

Customer Item Count

	Average Customer Item Count
Meat (Inc. Dairy & Eggs):	1.8
Fruit & Vegetable:	3.0

By increasing the number of items a customer purchases, customer spending is increased. The easiest potential for increased item count is with single-item customers. Here are some ideas to increase customer item count:

Suggested pairings: Anecdotally, some farms report that merely suggesting a second item works with customers. For example, when a customer buys an onion, they might say, “Are you cooking with onions? Do you need some garlic to go with that?” Meat vendors might say “Looks like you are planning for dinner, do you need something for breakfast the next day?”

Impulse items: Placing “impulse” items at your check-out station, like the candy at grocery store registers, might tempt customers to add an item at check out. Products that can be eaten right away are good candidates for impulse buys, including jerky, meat snack sticks, fruit, berries, and cherry tomatoes.

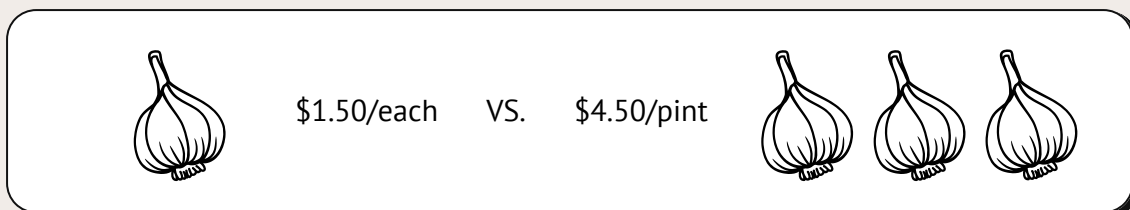
Bundles: Another possibility for increasing customer item counts is to present products in bundles. This practice is commonly used in retail stores with “2 for \$X” pricing and even “buy one, get one free (or half off)” discounts.

Average Item Value

	Average Item Value
Meat (Inc. Dairy & Eggs):	\$13.72
Fruit & Vegetable:	\$5.21

Farms may have an opportunity to increase their average CTS by increasing average item values through item package size and price adjustments. To do this, consider increasing the minimum size available for low value items. By increasing item package sizes, you effectively increase the average item value across all items at your market stall.

- For example, instead of selling garlic heads for \$1.50 each, place 3 in a pint container priced at \$4.50. This increases item value through pack size without changing the unit price.
- By eliminating the availability of low value items through price increases, average item value will effectively increase.

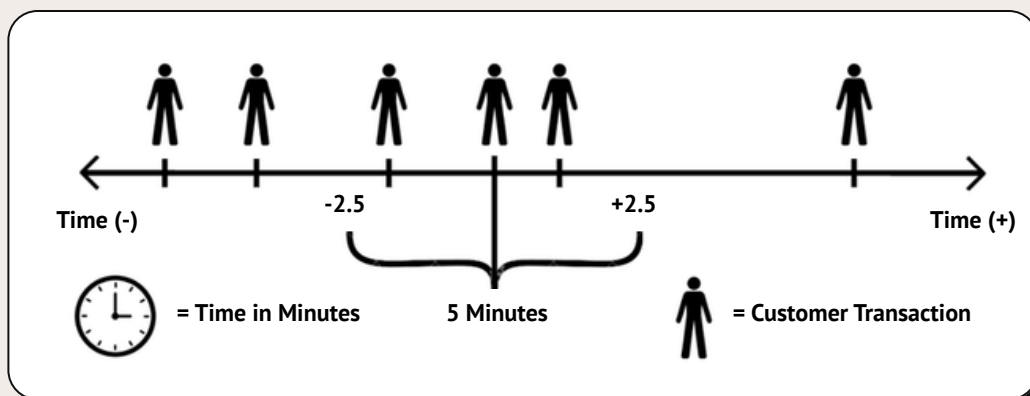


Customer Density and Its Impact on Customer Transaction Size

	Average Customer Density Impact
Meat (Inc. Dairy & Eggs):	-\$0.10
Fruit & Vegetable:	-\$0.13

Understanding this table:

- Customer Density is a measure of how busy you are at the time of each sale by counting all other transactions that happen within 5 minutes (i.e., 2.5 minutes before and 2.5 minutes after the sale). The project has found that, in general, with increasing customer density, there is a negative impact on customer spending.
- The effect compounds with each additional transaction within that 5-minute window.
- For example, in the case of Meat (including dairy and eggs), the negative coefficient (-\$0.10) means that for each additional transaction occurring within the 5-minute window, the average customer spends \$0.10 less. In other words, when a vendor is busy with multiple customers, customer spending is reduced.



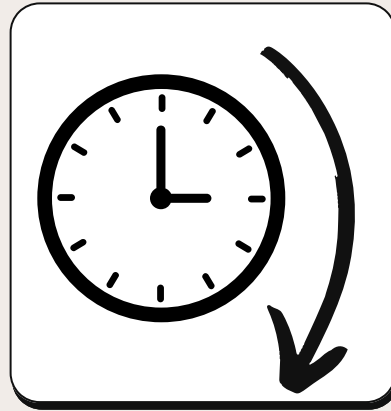
To learn ideas on how to address high customer densities, including by changing market stall layout and by adding additional staff, see the publication *“Enhance Shopper Experience, Earn More at the Farmers Market”* on our project’s website, in which this topic is discussed at length.

Impact of Market Hour on Customer Transaction Size

	Average Sale Hour Impact
Meat (Inc. Dairy & Eggs):	-\$0.12
Fruit & Vegetable:	-\$0.75

Understanding this table:

- Sale Hour: This coefficient reflects how much the average customer transaction size (CTS) decreases with each additional hour of the market, starting from the second hour. The effect compounds hourly.



Across all farms and markets, CTS in the first hour of a market tends to be highest, with customer counts and CTS typically dropping with each passing hour. These statistics imply both challenges and opportunities that can be addressed by farm marketing practices.

- It is critical to arrive on-time and complete set-up, ready to accept customers by, or preferably before, the official market start time (unless prohibited by market rules). To maximize daily sales, capture as many early and first-hour sales as possible.
- It stands to reason that early shoppers spend the most because they seek the widest selection, freshest products, and perhaps to beat the crowds and traffic. Using those assumptions, one can conclude that it may be possible to increase CTS later in the market by offering late shoppers what early shoppers seek: fresh products and a wide selection. To do this, come well-stocked and keep produce looking fresh with ice, water, and misting. You can estimate how much product to bring by looking at historic volumes in your sales data and bringing a bit more than you previously sold.

The **GrowNYC** publication “*Understanding Customer Behavior at Farmers Markets: Strategies for Increasing Sales and Customer Satisfaction*” shares conversion rates on customers walking by, looking into, and shopping at FM stalls in NYC along with helpful ideas on how to visually engage shoppers at FMs.

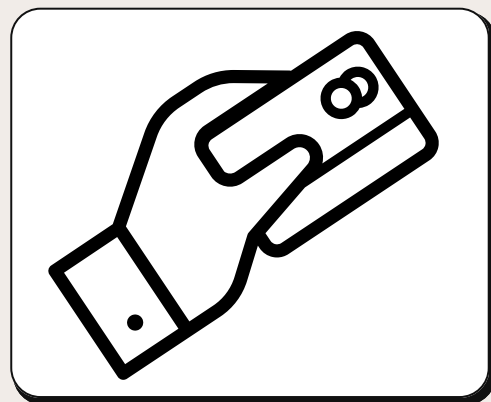
Customer Payment Methods

	Credit Card Payment Share	Other (Non-Cash) Payment Share
Meat (Inc. Dairy & Eggs):	52.95%	1.93%
Fruit & Vegetable:	47.30%	2.55%

	Credit Card Payment: Average Amount Above Cash	Other Payment Sales: Average Amount Above Cash
Meat (Inc. Dairy & Eggs):	+ \$3.31	- \$1.85
Fruit & Vegetable:	+ \$2.93	+ \$1.56

Understanding this table:

- The Average Amount Above Cash shows how much more credit card users spend compared to the average cash.



Multi-year project results show that customers who pay with credit card or other non-cash methods such as electronic payments (e.g., Apple Pay, Google Pay, Venmo, etc.) or EBT, tend to spend more than those who pay with cash. The ability for customers to pay with non-cash payment forms improves their experience, even winning shoppers who may have walked by otherwise. FMRP's research shows that accepting credit cards and other forms of payment increases customer spending compared to cash transactions. In fact, for credit card purchases, the amount gained is greater than the cost incurred for processing fees. Thus, it is important that potential customers know all the payment options accepted by your farm. Be sure to have payment acceptance signage vertically and clearly displayed and visible to any shoppers walking past your market stall or tent.

Top 10: Average Project Category Contributions

Veg & Fruit Product Category	Average Transaction Contribution
Vegetables Cut Flowers	\$25.20
Vegetables Other	\$18.64
Fruits Other	\$13.60
Vegetable Plants	\$12.65
Vegetables Mushroom	\$10.89
Vegetables Processed	\$10.44
Fruits Processed	\$10.43
Vegetables Leaf	\$9.65
Fruits Botanical	\$9.25
Fruits Berry	\$8.60
Meat (Inc. Dairy & Eggs) Product Category	Average Transaction Contribution
Turkey Whole	\$123.83
Lamb Leg	\$62.21
Duck	\$48.11
Pork Shoulder	\$35.71
Chicken Whole	\$33.13
Chicken Cuts	\$31.59
Beef Thin Cuts	\$31.13
Pork Butt	\$30.86
Beef Loin	\$30.25
Beef Chuck	\$30.13

Understanding this table:

This table highlights the top 10 Product Categories with the highest average contribution to customer purchases. The Average Transaction Contribution shows how much the purchase of an item in each category contributes to transaction size and reflects quantity and price.

To identify which products, fall under each category please refer to the document titled “*Point of Sale Product & Category Naming Protocol*”, located on the Best Practices tab of the project website.

Average Meat Sales Metrics by Species

Species	Average lbs. per Transaction	Average lbs. per Selling Day
Beef	2.01	22.14
Game Species	3.76	6.57
Lamb & Goat	1.80	5.97
Pork	1.72	33.63
Poultry	3.34	64.45
Veal	1.24	1.99

Understanding this table:

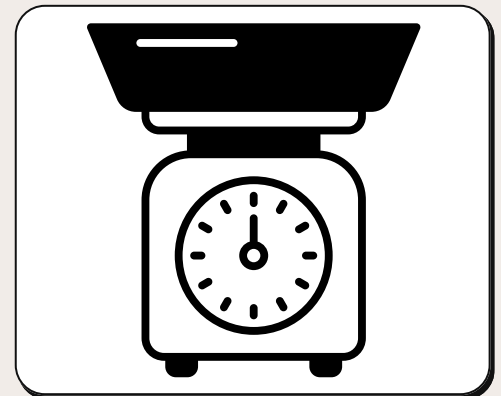
- Avg. lbs. per Transaction: Average weight (in pounds) sold per customer transaction for that species.
- Avg. lbs. Per Selling Day: The average number of pounds sold on a day that a farm sold this product.

Selling Produce by-the-Pound

	Fruit & Vegetable
Percent of transactions containing an item sold by-the-lb:	35.95%
Average impact on transaction size for by-the-lb product sales:	+\$0.80

Understanding this table:

- Project results show that customers tend to spend more when vegetables and fruits are sold by the pound.
- Percent of transactions containing an item sold by the pound: This shows the share of all fruit and vegetable transactions where at least one item was sold by weight (lbs).
- The average impact on transaction size shows how much more customers spend when at least one item in a transaction is sold by the pound.



We interpret this to mean that, for some products, customers buy more when the product is sold by weight (compared to those packed into a unit sold by the “each” such as individuals, pints, quarts, bunches, bags, etc.). For example, potatoes might be sold in quart containers or loose by the pound. The data teaches that customers tend to spend more on the potatoes sold by the pound compared to those sold in quart containers. Therefore, selling some crops by weight presents an opportunity to increase customer spending. While weighed items may take a little longer at check-out, they also work to increase CTS. Consider which crops, such as potatoes, tomatoes, eggplants, sweet peppers, squashes, or others, make sense for your farm to offer by the pound.

Please Note:

Throughout this report, “Fruit & Vegetable” represents transactions that contain exclusively fruit and/or vegetable items.



FARMERS MARKET RESEARCH PROJECT

farmersmarketresearch.cornell.edu



Join the Project!

- ✓ Receive free analysis of your market data
- ✓ Receive practical advice to increase your sales
- ✓ 1-on-1 consulting from the Cornell University team
- ✓ Access to the project's Market Metrics Dashboard
- ✓ For farms using Square POS at NY and PA farmers markets



Scan to Join

Ready to increase your market sales?

To join, scan or go to farmersmarketresearch.cornell.edu to create an account and share access to your Square POS data. Our enrollment survey will walk you through each step!



View Price
Reports

Keep Up to Date with Current Monthly Price Reports

Project data is aggregated and published into a monthly price report for fruit, vegetable, dairy, eggs and meat products sold at NY farmers markets, along with grocery store prices. All farm and market identities are kept anonymous in public reporting.



Dyson
Cornell
SC Johnson College of Business

Cornell **CALS**
College of Agriculture and Life Sciences